

New in asix6:

- ✓ **AsRaport**
*making reports based on
MS Reporting Services*
- ✓ **AsAlarm**
alarm log analysis
- ✓ **Web AsTrend**
- ✓ **Web AsPortal**
improved



03/2011
Commercial Information
Products
Price List
Valid since 01.03.2011

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asix software package

asix software package consists of several functionally interconnected products. A basic part of the package is **asix** visualization system being a SCADA (Supervisory Control And Data Acquisition) class software that performs wide range of functions for operator supervision over the technological objects, assuring both analog and digital data acquisition, possibility of process control, alarm and event recording, report generation and making process data available within the computer network. Every run-time license of **asix** allows designing of all system components, therefore *development* is available at no charge.

For correct **asix** operation, the following hardware and software requirements should be fulfilled:

- operating system: MS Windows XP, Windows 7, MS Windows Server 2003/2008,
- RAM system memory: recommended 1 GB,
- video: minimum - SVGA with 256 colours and 800x600 resolution,
- pointing device: anyone supported by operating system (mouse, trackball, touch screen).

The **asix** operates in one of the following language versions:

- Polish,
 - English,
- independently from the operating system language.

asix system is offered in the following packages:

- Standalone engineering station,
- Network engineering station,
- Operator panel,
- Operator station,
- Operator server,
- Network terminal,
- Operator terminal,
- Asix4Internet,
- AsAlert,
- AsAudit,
- OPC/DDE/OLE/.NET Server,
- AsAlarm **New**

New asix-EDUS educational package is intended for university / college usage. It includes 5 licenses with the functionality dependent on the way of configuring the USB hardware dongles used to run the software. An additional program available in the package enables reprogramming of the dongles according to the users' needs – so that the program could work as:

- WAUT – network terminal,
- WAUW – unlimited operator station,
- WAUS – unlimited operator server,
- WAUO – operator terminal.

And for each dongle the following additional options are available:

- @Asix4Internet – portal/ WWW server for simultaneous operation of one client,
- AsAudit,

The **asix** -EDUS license is valid for 1 academic year (till 30 September) – after this time the free of charge updating is available in ASKOM company.

Standalone engineering station is a license dedicated for development of applications. It allows to create all elements of application and perform run-time tests based either on communication links to PLC's or on virtual variables (with no connection to a physical source of data). The license has no limit on number of process variables but restricts application run-time to two hours ; data archiving and alarm servicing are executed only locally.

Network engineering station is a license dedicated for development of network applications. It allows design and testing of operator server applications. Thus it has capabilities, beyond the ones of Standalone engineering station, to access process data through network channels, to use network archives and to operate in check-up mode of alarm recognition (i.e. review the alarm list stored on operator servers). Run time in application mode is limited to two hours.

Operator panel is a license dedicated for HMI panels at half price of standard 'Operator station' license.

The operator panel allows to use network data (made available by 'Operator servers') as well as makes data available to other **local** applications of MS Windows environment by DDE/OLE/OPC/.NET server. The operator panel supports alarms in local OPERATOR mode without writing the alarms on local disk, and also enables data archiving for 1-day period. Due to specific technical features of operator panels (they do not have hard disc but FLASH memory) it is recommended to archive data either in operating memory on so-called RAM-disk or in USB external memory.

The 'Operator panel' license supports only WIN XP Embedded systems.

Operator station is a license dedicated for local operator stations which allows also to use network data (made available by Operator Servers) as well as makes data available to other applications of Windows environment by DDE/OLE/OPC/.NET server. The operator station provides servicing of alarms in local and check-up mode (i.e. review of alarm lists stored in remote operator servers), collects local data archives and allows to use (read) network archives. Operator station with more than 64 variables limit can also be used as the Operator terminal with available functionality of networked alarm servicing.

Operator station exists in six versions differing from each other by the number of process variables allowed in applications, namely 32 / 64 / 128 / 256 / 512 / 1024 / 4096 variables and without limit on number of variables (i.e. 2^{32} variables).

Operator server, like Operator station, is a license dedicated for operator computers but with additional possibility to export process data to other **asix** computers (operator stations and terminals) and to ensure network alarm servicing (broadcasting actual alarm statuses and alarm acknowledgement on all computers within the network). Apart from all features of Operator station, the Operator server makes possible to operate in **hot-redundancy mode** ensuring functions of data archive synchronization and redundancy of communication channels.

The Operator server exists in five versions differing from each other by the number of process variables allowed in applications, namely 64 / 128 / 256 / 512 / 1024 / 4069 variables and without limit on number of variables (i.e. 2^{32} variables).

Network terminal is a license dedicated for applications executed basing on data available on the network and (only) with check-up mode of alarm servicing. However possibility to run DDE/OLE/OPC/.NET server and data export to other Windows applications is allowed. Network terminal does not limit the number of process variables.

Operator terminal has similar features like the network terminal; the difference consists in possibility of current alarm processing in real time in network mode (information on current alarm status is received on-line). Thanks to this feature, it can be used in control room as operator station, without direct links to the PLC's.

New AsReport **asix6** package has a NEW reporting system integrated with Microsoft Reporting Services. For the user this means an option of freely designing, modifying, browsing and generating reports in **asix** environment..

Microsoft® SQL Server™ 2008 Reporting Services provides a complete, server-based platform designed to support a wide variety of reporting needs enabling organizations to deliver relevant information where needed across the entire enterprise. By using Reporting Services, which is a component of SQL Server 2008, one can create reports based on different data sources (including ad hoc reporting available through user-friendly interface), manage reporting environment involving planning how and when reports are generated, manage report subscriptions and control access rights, as well as provide users with reports in the appropriate formats (e.g., XLS, PDF, DOC, TIFF) in a convenient way (e.g. electronically by subscription, or by embedding reports in the business applications and portals).

As a part of **asix 6** integration with Reporting Services, the proprietary method for retrieving logged data from an ultra efficient **asix** archive through SQL queries is of key importance. A correct query to retrieve data from the **asix** archive is constructed with a user-friendly application supporting drag-and-drop functionality, which does not require the user to have any IT experience. Modules facilitating viewing (AsRapView) and publishing (AsRapDeploy) of reports were developed as a consequence of integration with the Reporting Services.

The **asix** system is compatible with both Reporting Services offered by free Microsoft SQL Server 2008 Express and the services made available in full MS SQL Server 2008.

@Asix4Internet is a license dedicated for installation of **asix** WWW server (to support WWW applications) either on **asix** operator server or terminal or on a computer with asixConnect installed. Asix4Internet license is encoded on the same hardware dongle used to run the **asix** servers, terminals or AsixConnect. It allows to connect concurrently one client station. Licenses that enable connection of 5 (or multiple of 5) additional clients are also offered. Asix4Internet includes **AsPortal**, **As2HTML**, **As2WWW** – a set of tools for access to process information from Internet Explorer 6 browser:

- **New AsPortal** – Portal of Process Information, ready for immediate use when connected to **asix** application. AsPortal displays application process database, current process values, current and historical alarms as well as data trends either in tables or graphic charts, presented in Internet browser window (demo: <http://asport.askom.com.pl/asport/>);
- **New AsTrend** – web-based version of the application for graphical analysis of historical data with features consistent with the Windows version of **asix**, particularly highly rated by users,
- **As2HTML** – library of scripts and CSS style sheets which supports design of process visualization for Internet browser window;
- **As2WWW** – set of tools for automatic conversion of **asix** application into IE 6 browser visualization.

AsAlert is a license of alert server used for remote notification of selected persons about important events and alarms. The messages can reach the addressees by means of e-mails or SMS messages sent through a GSM network, either using Internet or mobile network. AsAlert server license allows sending alarms from **asix** application that operates on the same station. To enable sending of alarms by AsAlert server from a remote station, the AsAlert Client license should be additionally installed on the remote station.

AsAudit ensures integrated support of users' authorizations and control of performed operations. AsAudit module realizes the following functions:

- Handling the database of users and their authorizations, common for all **asix** system modules. Except authorizations available in **asix** v. 4, AsAudit enables protection of access to any file included in application (that means, among other things, it is possible to block for the user the right of command calling, in effect, the right to display specified process screens) and protection of control operations related to individual process variables. All user log-in operations and also all events of attempted unauthorized access to application elements are registered in a database.
- Application file integrity control. This functionality consists in verification whether the contents of the vars database and the application files have been changed in an unauthorized way (i.e. whether user-made modifications were not confirmed through registration in AsAudit database). Each event of files modification is logged in the database.
- Logging control operations performed on selected process variables. AsAudit registers the following data: time of control execution, name of machine performing the control, ID of the logged-in user, value of process variable before the control operation and the control value .
- Logging the operator's actions. It is possible to register which masks (screens) , tables of variables, trends were opened and closed by operator on the selected **asix** system stations.
- System of entering and registering the user notes.

Functionality of AsAudit module in the field of application integrity control and registration of system operation history enables to realize system validation in accordance with **FDA 21 CFR Part 11 / GAMP4** regulations, applied in pharmaceutical and food processing industry.

Functions in the range of support of users and their authorizations as well as registration of user's notes are available in each engineering station, operator station, operator server and terminal license of **asix** system at no additional charge.

To use the functions of integrity control, logging the control operations and logging the operator's actions, the additional *AsAudit* or *AsAudit – Lite* license need to be bought for the mentioned above **asix** system licenses. Type of required AsAudit license depends on the basic **asix** system license used as follows:

WDUW local engineering station – no additional AsAudit license is needed
 WDUN network engineering station – *AsAudit – Lite* license is needed
 WATW, WAEW, WALW, WABW operator station– *AsAudit – Lite* license is needed
 WACW, WAAW, WAUW operator station – *AsAudit* license is needed
 Operator server – *AsAudit* license is needed
 Terminal – *AsAudit – Lite* license is needed

New AsAlarm is a completely new application providing tools for detailed analysis of alarms generated by the monitored site and of other data relating to alarm system operation. The application meets the EEMUA (The Engineering Equipment and Materials Users Association) guidelines No. 191. The module allows two-level alarm analysis:

- assessment of the alarm system structure validity for a specific application;
The application offers specific measures to the system designer, by which it is possible to assess if the system has been designed according to the universal guidelines and takes into account the operator's perception capacity
- In depth statistical and dynamic analysis of alarms registered on site;
In this scope AsAlarm is an essential tool for maintenance and repair services, both in the aspect of event timeline analysis and statistical analysis to determine trends in system behaviour.

AsAlarm license included in all asix packages entitles you to analyze systems with a number of alarms limited to 128 (no limit on the analysis time horizon), or restriction of the horizon of analysis to 2 weeks prior to the current date (with no limit on the number of alarms).

AsAlarm-Pro License – has no limit on the number of alarms and the period of analysis - it is offered as a separate item on the price list. Free MS SQL Server Express (with 4GB database size limit) or the full MS SQL Server version (no database size limitations) must be installed in order for AsAlarm-Pro to work.

@AsAlarm-Pro licence - is a web server license and one simultaneous client (only one client at a time can connect to the server). It has no restrictions on the number of alarms and the period of analysis - the licence is offered as a separate item on the price list. Free MS SQL Server Express (with 4GB database size limit) or the full MS SQL Server version (no database size limitations) must be installed in order for @AsAlarm-Pro to work.

@AsAlarm-Cal Licence - a license for one client in addition to @AsAlarm-Pro license - it is offered as a separate item on the price list.

.NET/OLE Automation/OPC/DDE server – AsixConnect6 includes:

- OPC, Automation, .NET and DDE servers for current data exchange,
- Automation, .NET and OLE DB servers for archived data exchange,
- OPC A&E and .NET server for alarm data available to the programs.

Any MS Windows program based on Automation, OPC, .NET or DDE protocols may co-operate with **asix** application by AsixConnect6 servers. Using servers, one can read / write data for process supervisory control and parametrization. Thanks to such solution current process variables as well as their archived values (registered trend of process variables) are accessible on-line in Windows system environment. Examples of software, basing on Automation and DDE server, for data exchange are Microsoft Office programs: Excel, Access, Word and PowerPoint. The applications created by use of these products and AsixConnect6 may efficiently enrich functionality of SCADA systems. These applications may be used for data analysis and visualization, model studies, specialized reports generation and designing databases of process variables.

AsixConnect6 is an integral part of **asix** package, but it may be also delivered as an independent module to be used on PC stations of within computer networks containing **asix** operator servers. In such a case, AsixConnect6 makes available to Windows software the process data accessed from remote computer stations connected directly to PLC's.

Independent access to asix system data

In the event of a user's own mechanism for accessing asix system current and archive data from a remote computer without the **asix** system license allowing network access to the data, purchase of a separate asix-CAL license is required for each such computer.

Extension to multi-monitor operation

Every **asix** license beginning with version 5.2.2 and higher makes possible to create applications on multi-monitor PC stations. It expands **asix** features by automatic recognition of location of new opened windows without the need to declare their coordinates directly as well as changes active set of keyboard shortcuts choosing the one, which is associated to the screen with active mouse cursor. This improves ergonomic of operation and of design.

New Preferential purchase of Microsoft SQL Server license

As part of the Microsoft ISV Royalty Licensing, ASKOM offers a purchase of Microsoft SQL Server at a very attractive prices (see price list). Embedded Runtime licenses are on sale. These products do not have any functional limitations, but are subject to the following licensing restrictions:

- Purchase of a Microsoft SQL Server license is only possible in conjunction with the simultaneous acquisition of **asix** license. Both licenses are inseparable.
- The end user may use the licensed Microsoft SQL Server only in conjunction with the **asix** application as one integrated solution.
- The end user may not use a licensed Microsoft SQL Server to run other applications or create new applications, or in any other context that is not associated with the solution based on the **asix** application.

Microsoft SQL Server can be licensed on either server-client or per-processor basis. The server-client mode requires the purchase of a license for the server and the appropriate number of CAL access licenses for all potential clients . In the per-processor mode the purchase of a CAL license is not required.

As an additional option one can buy Embedded Maintenance protection that provides updates of the licensed Microsoft SQL Server to the new versions. The right to receive updates only applies to the product versions issued during the validity of the Embedded Maintenance protection (normally one year). Embedded Maintenance protection can be purchased only at the time of license purchase. Protection can be renewed annually during the contract period.

Additional information

Method of variables counting for purpose of **asix** licenses

Licenses of **asix** packages differ by their functionality (operator station, operator server, engineering station, terminal) and limit of variables serviced. Below one can find information how to determine the number of variables allowed within a license:

- one analog measurement = one variable within license limit,
 - one 8,16 or 32 bit register = one variable within license limit,
 - one table element (8,16 or 32 bit) = one variable within license limit,
 - one internal (local) variable = one variable within license limit,
 - variable form NONE channel, not archived = does not apply to license limit,
 - variable in network channel = does not apply to license limit *.
- *) It doesn't apply to operator station with 32 variable limit as well as computers that make data available with use of GATEWAY function.*

ATTENTION: one 8, 16 or 32 bit register can transfer information about 8, 16 or 32 digital signals. The register could be split into separate signals at the level of visualization dynamic objects. Using such approach, 32 digital signals will occupy only one variable within the license limit.

Version update and upgrade

The versions of **asix** are numbered by **x.y.z**, where: **x** is a major number of the version, digit **y** is a minor number of the version and **z** is a number of package release. When only the digits **y.z** are different when version changes, it's called an **update** - ASKOM ensures **free update of system version**. If the major number **x** changes for new version, it is called an **upgrade** and it follows against payment according to the current price list.

ATTENTION: x.y.z number is obligatory from the version 6.0.1. The older versions were numbered according to the **x.yy.zzz** scheme, where **x.yy** were the main number of the version and digits **zzz** described modifications of the main version.

Communication modules

Each **asix** package includes, **at no additional cost**, a large set of communication drivers, which allow data exchange with measurement devices and most common PLC's of worldwide manufacturers. Apart from dedicated drivers for specific PLC's, **asix** includes open communication interfaces matching the standards of Windows environment and allowing connection of almost any PLC or measurement device, delivered by the manufacturers with appropriate data servers. These are:

- OPC client,
- DDE/OLE Automation client,
- MODBUS RTU,
- MODBUS TCP,
- PROFIBUS DP,
- CANBUS,

MODBUS RTU and GazModem drivers are adapted for data exchange on dial-up links by means of AsComm module. Other drivers may be also adapted for operation on dial-up links based on Customer request. ☎


Additionally, a special BUFOR driver (including full protocol specification) is delivered, which makes available an universal interface for data exchange with Customer's drivers.

Apart from above possibilities, which are included in every package, **ASKOM** offers (against payment) a development of special communication drivers for any device of the Customer, when data transfer protocol specification is delivered and, for non typical solutions, also a testing device.

4-day training

Fast mastering of basic skills required to develop and run an application is possible by 4-day training at ASKOM company site. Every Participant has his personal computer for training purposes, with latest versions of **asix** installed, and is learned how to develop the application from the very beginning. We make also our knowledge available about various non-typical solutions which make development works faster and easier, we share our knowledge of so-called "tricks" improving maintenance of the software and development of the applications. Part of information presented during the training is not included in any manual. Achieved knowledge and skills are tested by the users in their own original applications developed at training course.

SOFTWARE

Package name	Type	Price
Local engineering station	asix -WDUW	€ 120,-
Network engineering station	asix -WDUN	€ 390,-
Operator panel, 32 variables limit	asix -WATP	€ 150,-
Operator panel, 64 variables limit	asix -WAEP	€ 240,-
Operator panel, 128 variables limit	asix -WALP	€ 380,-
Operator panel, 256 variables limit	asix -WABP	€ 500,-
Operator panel, 512 variables limit	asix -WACP	€ 760,-
Operator panel, 1024 variables limit	asix -WAAP	€ 880,-
Operator panel, 4096 variables limit	asix -WAFP	€ 1020,-
Operator panel, "unlimited", limit: 2 ³² variables	asix -WAUP	€ 1150,-
Operator station, 32 variables limit	asix -WATW	€ 290,-
Operator station, 64 variables limit	asix -WAEW	€ 470,-
Operator station, 128 variables limit	asix -WALW	€ 750,-
Operator station, 256 variables limit	asix -WABW	€ 1000,-
Operator station, 512 variables limit	asix -WACW	€ 1520,-
Operator station, 1024 variables limit	asix -WAAW	€ 1750,-
Operator station, 4096 variables limit	asix -WAFW	€ 2030,-
Operator station, "unlimited", limit: 2 ³² variables	asix -WAUW	€ 2290,-
Operator server, 64 variables limit	asix -WAES	€ 570,-
Operator server, 128 variables limit	asix -WALS	€ 1000,-
Operator server, 256 variables limit	asix -WABS	€ 1210,-
Operator server, 512 variables limit	asix -WACS	€ 1950,-
Operator server, 1024 variables limit	asix -WAAS	€ 2240,-
Operator server, 4096 variables limit	asix -WAFS	€ 2540,-
Operator server, "unlimited", limit: 2 ³² variables	asix -WAUS	€ 3490,-
Network terminal	asix -WAUT	€ 470,-
Operator terminal	asix -WAUO	€ 620,-
Network terminal, „site license”	asix -WAUT/SL	

Every asix pack includes development, run time, DDE/OLE/OPC/.NET server and electronic documentation

SOFTWARE		
Package name	Type	Price
OPC/DDE/OLE /.NET server	asixConnect6	€ 180,-
Portal/ Server WWW for simultaneous operation of 1 client – add-on to licenses of asixConnect6 , terminals or operator servers	@ asix4Internet	€ 360,-
Portal/ Server WWW license extension - next 5 clients	asix4Internet+5	€ 900,-
AsAlert Server	AsAlert	€ 240,-
AsAlert Client, license for remote access to AsAlert Server	AsAlert-Cal	€ 130 ,-
AsAudit, license for operator servers and WACW, WAAW, WAUW operator stations	AsAudit	€ 900 ,-
AsAudit – Lite, license for WDUN network engineering station, WATW, WAEW, WALW, WABW operator stations and terminals	AsAudit - Lite	€ 260 ,-
AsAlarm for analysis of alarm/event logs of asix system application, no-limit license New	AsAlarm-Pro	€ 260 ,-
@AsAlarm for analysis of alarm/event logs of asix system application, license for Web Server and for simultaneous operation of 1 client New	@AsAlarm-Pro	€ 770 ,-
@AsAlarm license extension - next 1 client New	@AsAlarm-Cal	€ 1260 ,-
License for remote access to asix application data New	asix-Cal	€ 130 ,-
Educational package	asix-EDUS	€ 170,-
HASP key exchange	HASP	€ 60,-
Every asix pack includes development, run time, DDE/OLE/OPC/.NET server and electronic documentation		

ISVR Microsoft SQL Server licenses		
Package name	Type	Price
SQL Server 2008 R2 Standard, All Languages, Embedded - Server & 1 Client Runtime New	E65-00173	€ 146 ,-
SQL 2008 R2 Standard CAL, All Languages, Embedded - Runtime New	C30-00297	€ 91 ,-
SQL Server 2008 R2 Standard, All Languages, Embedded Maintenance - Server & 1 Client Runtime New	E65-00174	€ 18 ,-
SQL 2008 R2 Standard CAL, All Languages, Embedded Maintenance - Runtime New	C30-00298	€ 18 ,-
SQL Server 2008 R2 Standard, All Languages, Embedded - 1 Processor Runtime New	E65-00175	€ 3335 ,-
SQL Server 2008 R2 Standard, All Languages, Embedded Maintenance - 1 Processor Runtime New	E65-00176	€ 667 ,-

ADDITIONAL INFORMATION

Trial pack (demo) including full electronic documentation (on CD)	free of charge
Upgrade form asix for MS DOS to asix for Windows NT/98/2000/XP	☎
License change	difference in licenses price
Update	free of charge
Upgrade from version 2.yy.zzz to version 6.y.z	90% of specific license price
Upgrade from version 3.yy.zzz to version 6.y.z	80% of specific license price
Upgrade from version 4.yy.zzz to version 6.y.z	50% of specific license price
Upgrade from version 5.yy.zzz to version 6.y.z	35% of specific license price
Communication modules with exclusion of special modules	included in package price
Implementation of any communication protocol, not included on the list of available communication drives	☎
4 days training	€340,-

ORDERS

Order in writing shall include full company name, address, VAT identification number and permission to issue invoices without customer's signature.

Payments shall be made in cash or by bank transfer to following account:

ASKOM Sp. z o.o. Gliwice, POLAND
Józefa Sowińskiego 13

Bank PKO SA o/ Gliwice **94124013431111000023375352**

Prices specified are net value and do not include V.A.T.

Orders should specify type of hardware dongle - CENTRONICS or USB version.

Ordering by e-mail: office@askom.com.pl

CONTACTS

Technical information, documentation and examples are available in INTERNET - www.asix.com.pl

Favorable discounts for authorized Asix System Integrators and OEM's

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	Marian Strzałkowski:	asix@askom.com.pl	Tel. (32) 30 18 152

Discount rules

Companies that buy **asix** package for re-sale get 5% discount of the List Price with each purchase.

Discounts for companies being 'Integrator of Asix Package' are calculated on the basis of total net turnover during preceding 12 months.

Discounts do not apply to purchase of local engineering station license (**asix**-WDUW).

COMMUNICATION DRIVES INCLUDED IN THE PRICE

Protocol	Driver	Use
COMMUNICATION STANDARDS		
CANBUS	CAN_OPEN	CANBUS network protocol based on PCI_712 NT card by SELECTRON LYSS AG
CANBUS	CAN_AC_PCI	CAN network protocol based on CAN_AC1_PCI and CAN_AC2_PCI cards by Softing GmbH
CANBUS	GFCAN	CANBUS network protocol based on CanCard by Garz&Fricke Industrieautomation GmbH
COMLI	COMLI	COMMunication LInk protocol allowing communication with AC800C, AC800M and AC250 PLCs from ABB as well as SattCon PLC. Data exchange takes place over RS-232 or RS-485 serial link.
DDE KLIENT	DDE	DDE protocol of WINDOWS system, communication with any PLC using its DDE server
M-BUS	MBUS	Serial bus protocol according to EN 1434-3, frequently implemented within heat meters (eq. MULTICAL by KAMSTRUP). Data exchange over RS-232 serial links, (attention: third-party master station of M-Bus network required)
MODBUS RTU	MODBUS	Serial bus protocol for MODBUS/RTU, asix as a MASTER
MODBUS SLAVE	MODBUSSLV	MODBUS protocol, asix in SLAVE mode
MODBUS TCP	MODBUS_TCP/IP	MODBUS network protocol based on TCP/IP, according to OPEN MODBUS/TCP specification by Schneider Electric
OPC KLIENT	OPC	OPC (OLE for Process Control) protocol, communication with any PLC using its OPC server, according to OPC 2.04 specification
PROFIBUS DP	DP	PROFIBUS DP network protocol, based on PROFBoard card by Softing GmbH
PROFIBUS DP	DP5412	PROFIBUS DP network protocol based on CP5412 (A2) or CP5613 of Siemens
SNMPv1 i SNMPv2c	SNMP	SNMPv1 and SNMPv2c protocols – management of various elements of telecommunication networks, such as routers, switches, computers, or telephone switchboards. The driver performs its functions by using the SNMP Management API
SIMATIC S5 (Siemens)		
AS511	AS511	Protocol using programming device interface of SIMATIC S5 PLC
AS512	AS512	Protocol of CP524/525/544 communication processors
SINEC L2	SINECL2	Protocol of PROFIBUS network with SEND/RECEIVE (FDL) interface for SIMATIC S5
SINEC H1	SINECH1	Protocol of Ethernet industry network for SIMATIC S5 PLC's, SEND/RECEIVE interface, based on CP1413
SIMATIC S7 (Siemens)		
AS512	AS512S7	AS512 protocol for SIMATIC S7 PLC's, based on CP300 processor
Ethernet	SAPIS7	S7 protocol for Ethernet network
MPI (converter)	MPI	Protocol of MPI network for SIMATIC S7 PLC's, based on PC/MPI converter
MPI (CP5611/SOFTNET)	SAPIS7	Protocol of MPI network for SIMATIC S7 PLC's, based on CP5611/SOFTNET
PPI	PPI	Protocol of PPI interface for SIMATIC S7 series 200 PLC's, based on PC/PPI converter
PROFIBUS / MPI	NetLink	S7 protocol of PROFIBUS network using NetLink Lite module of SYSTEME HELMHOLZ
PROFIBUS / MPI	NetLinkPro	Protocol for exchanging data with S7 PLCs with use of NETLink PRO (gateway Ethernet <-> MPI/Profibus) manufactured by SYSTEME HELMHOLZ
PROFIBUS	SAPIS7	S7 protocol of PROFIBUS network, based on CP5412 (A2) or CP5613

COMMUNICATION MODULES INCLUDED IN THE PRICE

Protocol	Driver	Use
SIMATIC S7 (Siemens)		
S7_Ethernet	S7_TCPIP	Used for data exchange with SIMATIC S7 PLC's through Ethernet connection with use of standard computer network card; the product does not require the installation of SIEMENS SIMATIC NET software on asix system PC as well as the adaptation of PLC software for data exchange purposes
BECKHOFF		
Ethernet	CtTwinCAT	Data exchange between asix and PLC's of Beckhoff Industrie Elektronik: BC series, CX1000 and TwinCAT PLC (PC based control system). Communication is based on Ethernet network using ADS interface
GE FANUC (General Electric)		
SNPX	CtSNPX	Serial communication via SNPX protocol with Series 90 and VersaMax PLCs
SRTP	SRTP	SRTP protocol allowing communication over TCP/IP with VersaMax Nano/Micro PLC's (based on IC200SET001 converter) and VersaMax or Series 90 PLC's over TCP/IP (based on IC 693 CMM321)
LG controllers		
LG proprietary protocol	CtLG	Serial communication via dedicated protocol with Master-K and Glofa GM PLCs
mitsubishi		
A1SJ71C24-R2	MELSECA	Serial bus protocol for MELSEC-A and FX2n PLC's, format 1 dedicated
MODICON (AEG, Schneider Electric)		
MODBUS PLUS	AM_SA85	MODBUS PLUS network protocol, based on Schneider Electric AM-SA85-000 card
SYSMAC (Omron)		
HOSTLINK	OMRON	Serial bus protocol for SYSMAC series PLC's
FESTO		
FESTO Command Interpreter	FESTO	Serial bus protocol for FESTO PLC's , using diagnostic interface
ADAM (Advantech)		
ADAM 4000	ADAM	RS485 serial bus protocol for ADAM 4000 series modules
SAIA		
Ethernet S-Bus	CtSbusTcpip	Protocol used for data exchange between asix system and PLCs of PCD SAIA-Burgess family by means of TCP/IP
S-Bus	S-BUS	Protocol of programmer unit interface and S-Bus network for SAIA Burgess Electronics PLC's
DIGITAL PROTECTION DEVICES		
ANSI X3.28	CtSrio	Protocol for data exchange with SRIO 500M ABB hub; communication via RS-232 interface; the transport layer based on ANSI X3.28 protocol in full-duplex mode with BCC checksum
AREVA	AREVA	Protocol for digital protection devices MiCOM of AREVA; the list of serviced devices includes MiCOM P127 and MiCOM P34x series
CZAZ	CZAZ	Protocol for digital protection devices CZAZ-U and CZAZ-UM of ZEG-Energetyka
MultiMuz	MultiMuz	RS232/485 serial link protocol for microprocessor devices of MultiMUZ type (manufactured by JM-Tronik)
MultiMuz	MultiMuz_tcpip	Protocol for data exchange with microprocessor devices of MultiMUZ type (manufactured by JM-Tronik) over Ethernet by means of TCP or UDP

COMMUNICATION MODULES INCLUDED IN THE PRICE

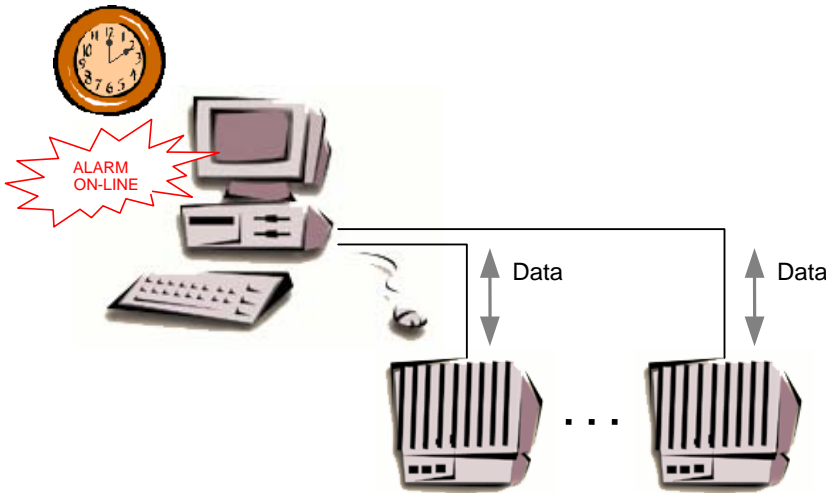
Protocol	Driver	Use
DIGITAL PROTECTION DEVICES		
MUPASZ	MUPASZ	Serial bus protocol for universal microprocessor MUPASZ PLC for power industry protection devices - Institute of Telecommunication and Radio Engineering in Warsaw
MUZ	MUZ	Protocol of MUZ microprocessor PLC for power industry protection devices
SOCOMEK	MODBUS	Modbus RTU protocol for communication with devices for measurement and registration of electrical values in 1-, 2- and 3-phase nets of low and high voltage – DIRIS A10, A20, A40/A41 of SOCOMEK
SPA	SPA	SPA bus protocol for protection of switching stations manufactured by ABB
METERS, REGULATORS / OTHERS		
AK	CtAK	Protocol for data exchange between asix system and Emerson MLT2 analyzers
AK	S700	Protocol for gas analyzers by MAIHAK
BASKI	CtBaski	Protocol for data exchange between asix system and BASKI system
CALEC MCP	CtCalec	Communication with CALEC MCP devices by Aquametro
COMPOWAY/F	K3N	Universal OMRON meters protocol
CPIII	CPIII	Communication protocol for CP-III/E control panels used to control compressors manufactured by MYCOM (MAYEKAWA)
DataPAF	DataPAF	Communication protocol for energy meters DataPAF
DMS500	DMS500	Serial bus protocol for DURAG D-MS 500 pollution emission analyzers
DMS285	DMS285	Serial bus protocol for DURAG D-MS 285 pollution emission analyzers
DSC	DSC	DSC PLC protocol (analyzers for chlorine ion content in water)
DXF351	DXF351	Communication protocol for Compart DXF351 devices by Endress+Hauser
EcoMUZ	CtEcoMUZ	Protocol for data exchange between asix and Microprocessor Protecting ecoMUZ Devices made by JM Tronik
FP1001	FP1001	Serial bus protocol for heat and steam flow meters by METRONIC Kraków
GAZ_MODEM	MACMAT	Serial bus protocol for gas flow correctors MACMAT and COMMON
IEC 61107	CtZxD400	CtZxD400 driver is used for data exchange between asix and electric energy counters of ZxD400 type, manufactured by Landys & Gyr, via RS-485 interface;
K-Bus	K-Bus	Communication protocol implemented within DECAMATIC regulators of VISSMAN boilers
Logo	CtLogo	Used to exchange data between asix system and Logo OBA5 controller from SIEMENS with use of programmer interface of the controller
LUMBUS	LUMBUS	Communication protocol for meters manufactured by LUMEL
MAX-1000	CtMax1000	Protocol to exchange data with MAX 1000 camera managing system of ULTRAK
M200	CtM200	Communication protocol for data exchange between asix and M210G Spirax Sarco stations
MEC	MEC	Proprietary protocol allowing communication with heat meters MEC07 and MEC08 manufactured by ITC Łódź.
MEVAS	MEVAS	Serial bus protocol for MEVAS pollution emission analyzers
MicroSmart	MicroSmart	Used for exchanging data with MicroSmart controllers of IDEC
MN_Invensys	CtNCP	Used to exchange data between asix system and MN-series controllers from Invensys (former Satchwell)
MPS	MPS	Serial bus protocol for MPS power network parameter meters MPS by OBR Metrologii Elektrycznej in Zielona Góra
MSP1X	MSP1X	Serial bus protocol for MSP-1x PLC's by ELMONTEX

COMMUNICATION MODULES INCLUDED IN THE PRICE

Protocol	Driver	Use
METERS, REGULATORS I OTHERS		
MUS	CtMus04	Protocol to exchange data with and microprocessor-based control devices MUS-04 manufactured by ELEKTROMETAL S.A. from Cieszyn
Protokół firmy NordicID	CtNordicRF	Protocol to exchange data with Nordic ID RF 601 bar code reader of NordicID
Pa5	CtPa5	Communication protocol for data exchange between asix and PA-5 converters of POWOGAZ S.A. Poznan
PN-EN-62056-21	CtEqabp	Protocol used to exchange data with EQABP electricity meters of Pozyton through RS-485 interface
PN-EN-62056-21	CtEqm	Protocol used to exchange data with EQM electricity meters of Pozyton through RS-485 interface
PN-EN-62056-21	CtLzqm	Protocol used to exchange data with LZQM electricity meters of Pozyton through RS-485 interface
PMC-4000	CtPmc4000	Communication protocol for data exchange between asix and POLON 4800 fire alarm control panel; data are transferred via serial interface RS-232
PROTHERM	CtProtherm	Serial bus protocol for Protherm 300 DIFF controller by Process-Electronic GmbH
PROTRONICPS	PROTRONICPS	Communication protocol for PROTRONIC PS regulators by Hartmann & Braun
SINTONY SI	CtSi400	Communication protocol for alarm exchanges with Sintony SI 400 of SIEMENS
TALAS	TALAS	Serial bus protocol for TALAS pollution emission analyzers according to the TALAS 2.3 (007)22 specification
SPECIAL DRIVERS		
BAZA	BAZA	Communication protocol which allows to import database into asix system. Access to database is realized based on ADO technology
BUFOR	BUFOR	Communication protocol using memory buffer; data exchange with driver developed by user
FILE2ASIX	FILE2ASIX	Communication protocol used for importing data from the text files of the specified structure into asix system
CtGlobal	CtGlobal	Driver used to exchange data between asix application and so-called exchange file, which is a container for the current parameters of the driver variable (name, status, value, timestamp)
None	None	The None protocol doesn't realize a physical connection with the controller. It may be used for: <ul style="list-style-type: none"> • application testing in simulation mode, • data exchange between asix applications by means of process variables.
ZdarzenieZmienna	ZdarzenieZmienna	The driver is used to generate process variables of WORD types (16-bit word) on the basis of current values of alarm events in the asix system.

LICENSES CHARACTERISTIC

1. Standalone engineering station asix-WDUW



Data

No possibility to access network data.

Number of variables

Unlimited.

Alarms

Alarm servicing in local mode.

Archive

Local archive.

Time

Application run-time limited to 2 hours.

DDE/OLE/OPC/.NET server

Yes – for local data.

2. Network engineering station asix-WDUN

Data

Possibility to use all types of data.
Possibility of remote control via operator server.

Number of variables

Unlimited.

Alarms

Alarm servicing in the following modes:

- local;
- check-up - review of historic alarms from other stations.

Archive

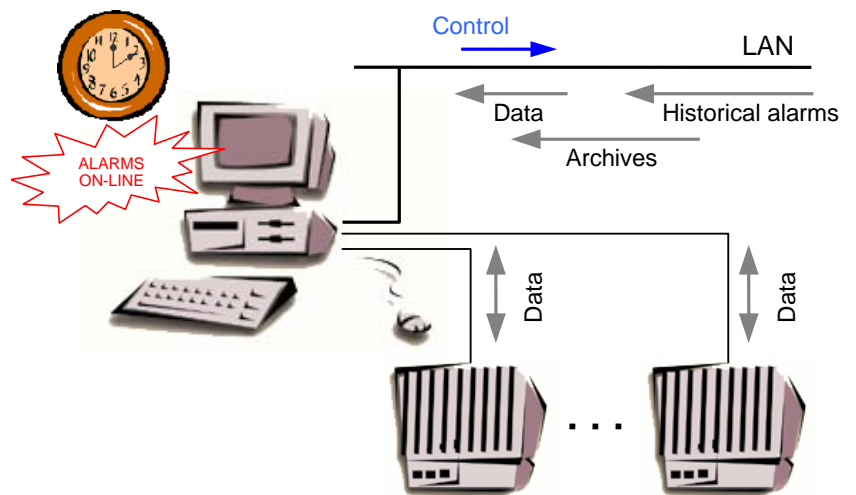
- Local archive.
- Possibility to use remote archives.

Time

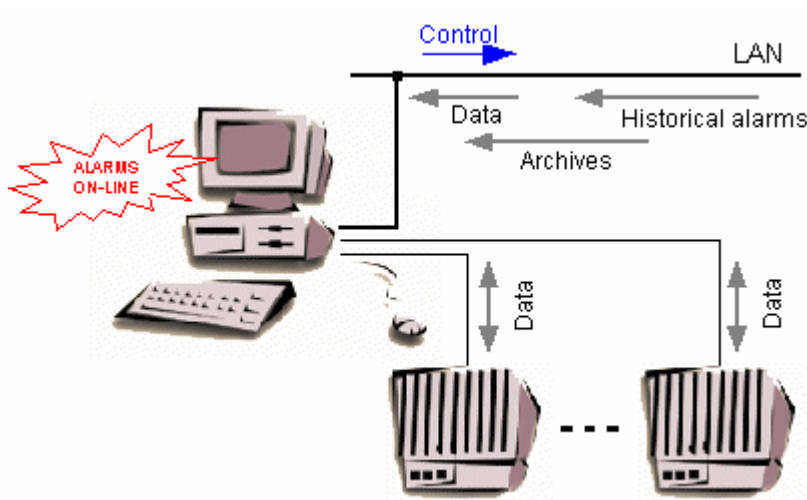
Application run-time limited to 2 hours.

DDE/OLE/OPC/.NET server

Yes.



3. Operator station asix -WATW; WAEW; WALW; WABW; WACW; WAAW; WAFW; WAUW



Data

Possibility to use all data types.
Possibility of remote control via Operator server.

Number of variables /from physical and virtual channels/:

- adequately: 32, 64, 128, 256, 512, 1024, 4096 or unlimited;
- number of variables from network channels is unlimited (exception: WATW - without variables from network channels).

Alarms

Alarm servicing in the following modes:

- local;
- check-up - review of historic alarm from other stations.

Archive

- local archive;
- possibility to use remote archives.

Functions of engineering station

Yes - application development.

DDE/OLE/OPC/.NET server

Yes.

4. Network terminal asix-WAUT

Data

Possibility to use only remote data.
Remote control possible via Operator server.

Number of variables

Unlimited.

Alarms

Alarm servicing **only** in check-up mode -review of historic alarms from other stations.

Archive

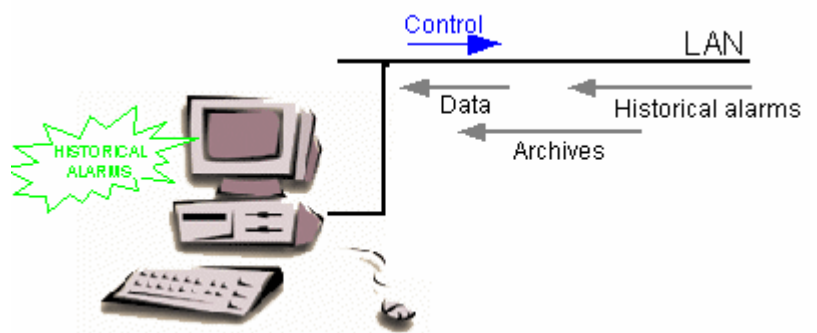
Possibility to use remote archives.

Functions of engineering station

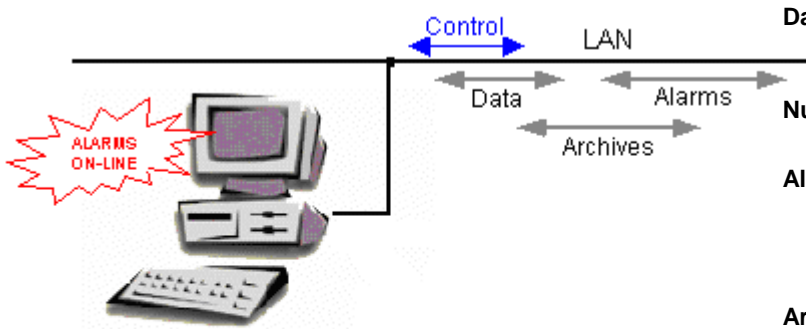
Yes - application development.

DDE/OLE/OPC/.NET server

Yes.



5. Operator terminal asix-WAUC



Data

Possibility to use only remote data.
Remote control possible via Operator server.

Number of variables

Unlimited.

Alarms

Alarm servicing in the following modes:

- check-up - review of historic alarm from other stations;
- network - synchronized service of alarms from many stations.

Archive

Possibility to use remote archives.

Functions of engineering stations

Yes - application development.

DDE/OLE/OPC/.NET server

Yes.

6. Operator server asix-WAES; WALS; WABS; WACS; WAAS; WAFS; WAUS

Data

Possibility to use all types of data.
Remote control execution.
Possibility of remote control via other Operator server.

NUMBER OF VARIABLES /from physical and virtual channels/

- Adequately: 64, 128, 256, 512, 1024, 4096 or unlimited;
- Number of variables from network channels is not limited.

Alarms

Alarm servicing in the following modes:

- local;
- check-up - review of historical alarms from other stations;
- network - synchronized service of alarms from many stations;
- server of historic alarms.

Archive

- archive server;
- local archive;
- possibility to use remote archive.

Functions of engineering station

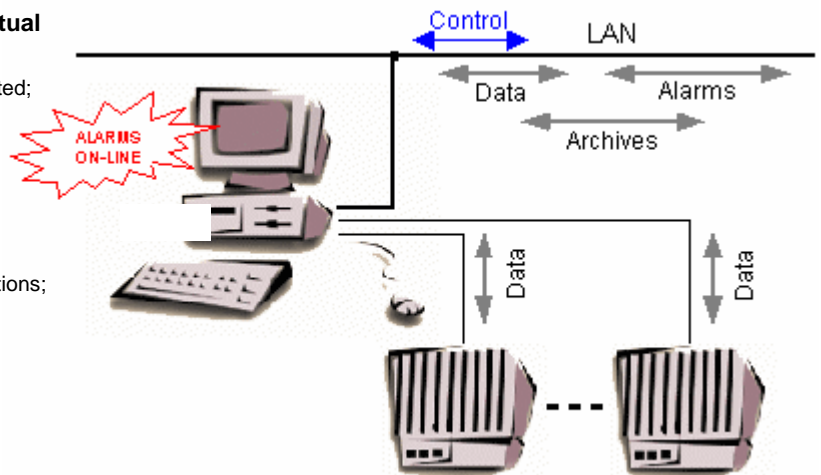
Yes - application development.

DDE/OLE/OPC server

Yes.

Hot-redundancy operating mode

- Synchronization of alarm log;
- Synchronization of data archive;
- Redundant communication channels.



7. Portal/ WWW server Asix4Internet

Data:

- **AsPortal** – access to current variables in tables;
- **As2WWW** – access to variables (the same as on operator station).

Number of variables / from physical and virtual channels/:

- Unlimited.

Number of simultaneously operating users:

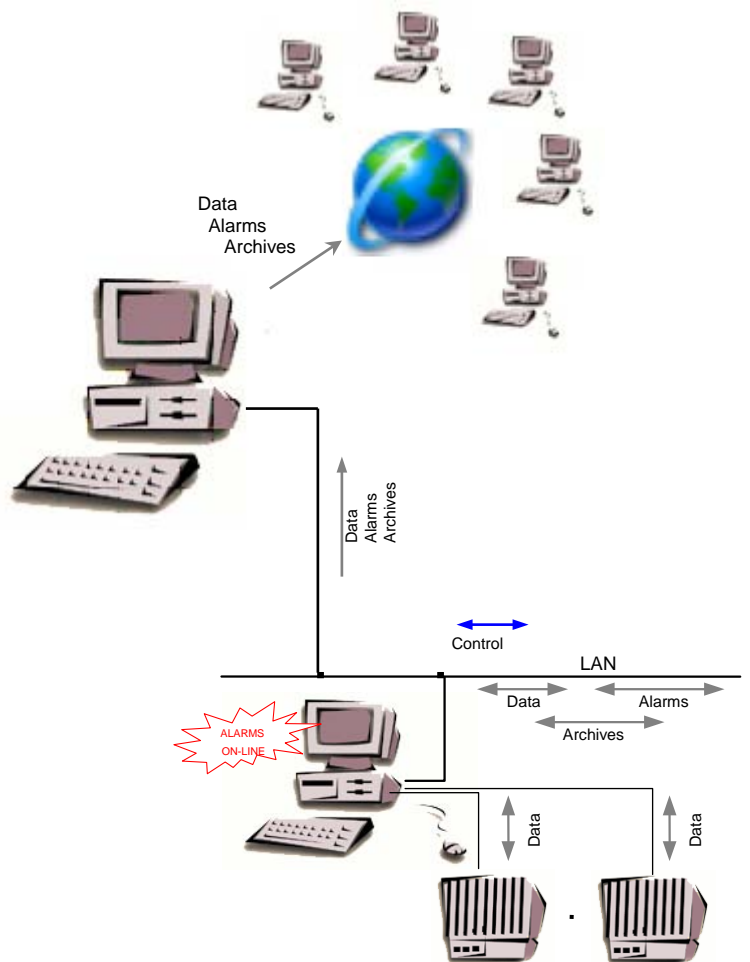
- 1 user;
- extension to any number of users.

Alarms

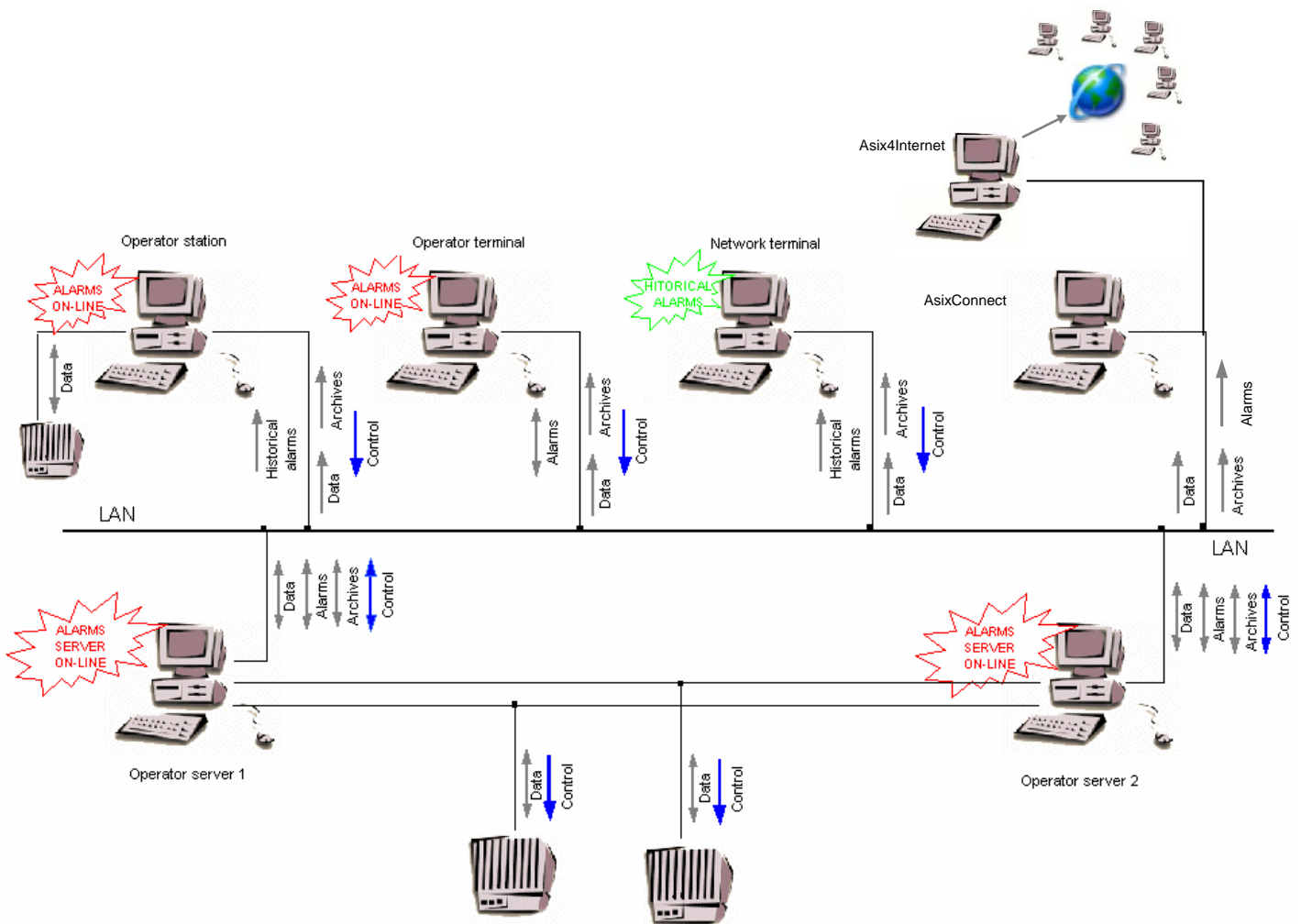
- **AsPortal** – access to current and historical alarms;
- **As2WWW** – access to operator station alarms.

Archives

- **AsPortal** – access to archival variables in tables or graphic charts;
- **As2WWW** – access to archives like on operator station.



8. Sample system configuration



Computers configured as above have the following properties:

- Operator server 1 - monitoring of current data, execution of local control, alarm and current event monitoring, data archiving, alarm/event log archiving, making current and archive data and alarms/events available within LAN, remote control possibility.
- Operator server 2 - a twin station for the Operator server 1 with a capability of full redundancy.
- Operator station - monitoring of current data, execution of local control, alarm and current event monitoring, data archiving, alarm/event log archiving, **no data are made available** within LAN, possibility to use data and alarm/events of Operator servers, remote control possibility via Operator server.
- Operator terminal - access to current and historical data and alarm/events of operator servers, remote control possibility via Operator servers.
- Network terminal - access to current and historical data and historical alarm/events of Operator servers, remote control possibility via Operator servers.
- AsixConnect4 - access to current and historical data of Operator servers, remote control possibility via Operator servers.
- Asix4Internet - access to process data on Internet.





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